

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/521,568</p>	<p>Applicant(s) SATO, HARUYUKI</p>	
	<p>Examiner DENNIS CORDRAY</p>	<p>Art Unit 1791</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 May 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1,2,6,7,11-14,16-20,22-24,26 and 27.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Steven P. Griffin/
Supervisory Patent Examiner, Art Unit 1791

/Dennis Cordray/
Examiner, Art Unit 1791

Continuation of 3. NOTE: The amendments present new claim 28 that requires further consideration and search. The amendments also present new combinations not previously presented, that require further consideration and searching. For instance, the limitations of Claims 18 and 27 are included in Claim 1 as amended, and therefore in all claims dependent from Claim 1, whereas previously the limitations were only separately, and not jointly, combined with Claim 1. Also, Claims 2 and 14 now carry the limitations from former Claims 18 and 27, providing a combination not previously presented.

Continuation of 5. Applicant's reply has overcome the following rejection(s): Claim 27 under 35 U.S.C. 101, 1st par and Claims 26 and 27 under 35 U.S.C. 103 as obvious over Zhang et al in view of others..

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments, filed 5/5/2008, with respect to the rejections of Claim 27 under 35 U.S.C. 101, 1st par are convincing. The cited reference lines disclose adding the surfactant to an aqueous solution of the copolymer. The rejection is withdrawn.

Applicant's arguments, see p 17, with regard to the rejection of Claims 26 and 27 under 35 U.S.C. 103 as obvious over Zhang et al in view of others is convincing. As insufficient evidence of obviousness was presented, the rejection of Claims 26 and 26 is withdrawn.

With regard to Applicant's arguments that the new rejections under 35 U.S.C. 112 were made for the first time in the outstanding Office Action, the rejections were made necessary by Applicant's amendments.

With regard to the arguments against the rejections of Claims 1-2, 6-7, 11-14, 16-20, 22-24 and 26-27 under 35 U.S.C. 112, 2nd paragraph, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments directed to the proposed amendment to the claims are moot as the proposed amendment was not entered.

With respect to the arguments on p 15 that Zhang et al is not analogous art, both the claimed invention and Zhang et al involve adding a composition comprising the claimed polymers and a surfactant to a papermaking furnish. The composition thus made is substantially identical in each case, regardless of whether the surfactant was used in the polymerization process or not. The composition will act as a retention and drainage aid as taught by Zhang et al as well as result in the claimed improved properties in the paper for reasons given in the outstanding Office Action. "[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

With regard to the examples disclosed by Zhang et al, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). The broader disclosure of Zhang et al supports and does not criticize, discredit, or otherwise discourage the embodiments described in the outstanding Office Action.

Regarding the Examiner's use of "functionally equivalent option" on p 8, lines 9-16 of the outstanding Rejection, Fallon was used to teach typical papermaking steps (the portion of the reference used is the Background section and describes a general papermaking process, including the importance of adding retention aids in the wet end of the process). Since the description is in the background section, it is considered by the Examiner to be well known or generally known in the art. By "functionally equivalent option", the Examiner means that the composition of Zhang, which is disclosed by Zhang for use as a retention and drainage aid in a papermaking process, is capable of performing the functions of the retention aids taught by Fallon as a part of a general papermaking process. There is no "Official Notice" taken, merely the use of a disclosed retention aid added in known manner in a generally disclosed papermaking process that uses a retention aid.

Regarding the Examiner's use of "functionally equivalent option" on p 9, lines 8-10 of the outstanding Rejection, Zhang discloses addition of a stabilizer, which may include any vegetable gum, a polysaccharide, a cellulose product or their chemically modified derivatives (col 11, lines 20-22). The Examiner construes this as meaning that any vegetable gum, polysaccharide, cellulose product or their chemically modified derivative is capable of functioning as a stabilizer. The instant Specification recites a broad range of molecular weight for the usable polysaccharides. Alternatively, a broad range of viscosities is recited, ranging from 1 mPas, which is the viscosity of water, to 4,000 mPas. Absent convincing evidence in the instant Specification that a polysaccharide within this broad range provides unexpected advantages, the Examiner considers it to have been obvious to one of ordinary skill in the art to use any polysaccharide, including the claimed polysaccharides, in the process or composition disclosed by Zhang and to have a reasonable expectation of success. No "Official Notice" was taken, merely the use of a stabilizer within the disclosure of the prior art, where any polysaccharide is disclosed as being a suitable stabilizer.

Regarding the Examiner's statement that the claimed papermaking speed is typical, no "Official Notice" was taken. Rather, a table from a handbook for paper technologists was used reciting maximum known operating rates for making various kinds of paper. Of all of the types of paper listed in the table, only one, a heavy (470 lb/3000 ft²) liquid packing paper, which is not claimed in the instant application, is made at slower speed than claimed. All of the other papers are made at the claimed speed and, in most cases, significantly faster speeds. The Smook reference was published in 1992 and the information within is thus considered by the Examiner to be well known or generally known in the art. Why would it not have been obvious to one of ordinary skill to operate at papermaking speed typical or well known in the art?

Regarding Biale, the claimed ethoxylated alcohol surfactants are well known nonionic surfactants used in emulsion polymerization. Biale was cited as evidence that these surfactants are known and have been known since at least 1973 for use in emulsion polymerization, thus are well known or generally known in the art. Further, the claimed surfactants are commercially available under many tradenames (see *Frazee*, 4845149, col 5, lines 20-42), further evidence that these surfactants are well known. The fact that both the surfactants disclosed by Zhang and the claimed surfactant were known for the same use in the art presents strong evidence of obviousness in substituting one for the other as a functionally equivalent option. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). Why would it not have been obvious to one of ordinary skill to use the claimed surfactant and have a reasonable expectation of success?

With regard for support in Zhang et al for the calculations of the ratio A/B, Applicant notes that Example 2 of Zhang et al teaches a maximum active content of 10.6% whereas Table 5 shows 15%, and concludes that something was removed from the polymerization solution by filtering. Example 2, col 12, discusses the making of Polymer IV, as also discussed by Applicant on p 19. Table 3, col 13, shows an active content for Polymer IV of 10%, which corresponds approximately with Applicant's calculations, thus very little was removed by the filtration. Table 5 represents an entirely different polymer solution (Polymer VI) having an active content of 15%. There is no connection between the two examples wherein one solution is a filtered version of the other. In any case, Applicant calculates on p 20 that, using the polymer IV of Example 2, an A/B ratio within the claimed range is also obtained.

The rejections not indicated herein as overcome are maintained..